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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/882,320

06/15/2001

Andrew Carver

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8429

27572

7590

06/24/2004

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EXAMINER

PHILOGENE, PEDRO

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/882,320	<b>Applicant(s)</b> CARVER ET AL.	
	<b>Examiner</b> Pedro Philogene	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Objections***

Claims 27,28 are objected to because of the following informalities: in claims 27,28 lines 1, the term "the invention" should be --the method--. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,12,14,29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (4,516,569) in view of Schmitt et al. (3,739,773).

With respect to claims 1, 29, Evans et al disclose a device (20) for insertion into a first phalange and a second adjacent phalange, as set forth in column 1, lines 13,14 and column 3, lines 17-19, so as to fuse, as set forth in column 3, lines 7-11, the first phalange to the second phalange, comprising, a substantially elongated member (21); wherein the member (21) has a first end portion, the middle portion and a second end portion; as best seen in FIG.5, spaced and opposed from the first end portion, wherein the middle portion has a curvature such that a fixed angle, as best seen in FIG.5, is formed between the first end portion and the second portion. Curvature has been interpreted to mean that the first and second end portions are at an angle as shown in FIG.5 of Evans and FIG.4 of the instant application. This is consistent with applicant's lack of disclosure of any radius of curvature.

It is noted that Evans did not teach the use of a resorbable material, as claimed by applicant. However, in a similar art, Schmitt evidences the use of a resorbable material in devices which are to be inserted into bones so that no scar tissue remains and bone marrow is regenerated permitting the bone to accomplish its organic functions, as set forth in column 10, lines 53-64. As to the middle portion operable to have a user formable curvature, the resorbable material of Schmitt would allow a user to fix the angle in the device of Evans et al. as set forth in column 3, line 30.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Evans et al to be made of resorbable material as taught by Schmitt so that no scar tissue remains and bone marrow is regenerated permitting the bone to accomplish its organic functions.

With respect to claims 12,14, the above combination of references teaches all the limitations; as set forth in the abstract of Schmitt et al and as sets seen in FIG.5 of Evans et al.

Claims 2-11,13,15-28,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (4,516,569) in view of Schmitt et al. (3,739,773) in view of Bramlet (5,984,970).

With respect to claims 2-11,13,15-25,30, it is noted that the above combination of references teaches all the limitations, except for a the first end portion and the second end portion having a surface portion for facilitating retention within the first phalange and the second phalange; as claimed by applicant. However, in a similar art, Bramlet evidences the use of a device having a first end portion and a second end portion

having a surface portion for facilitating retention within the first phalange and the second phalange such that a substantive holding force will be developed when the end portion is threadably secured within the bone of the phalange.

Therefore, given the teaching of Bramlet, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the fins of the device of Evans/Schmitt with the threads of the device of Bramlet to be implanted in the phalanges of a finger such that a substantive holding force will be developed when the end portions are threadably secured within the bone of the phalanges.

With respect to claims 26-28,31,32 the method steps, as set forth, would have been obviously carried out in the operation of the device, as set forth above.

### ***Response to Amendment***

Applicant's arguments filed 3/8/04 have been fully considered but they are not persuasive. Applicant stated that it would have been obvious to one skilled in the art to combine Evans et al. with Schmitt et al., however, applicant's attention is directed to column 1, lines 60-67. Although Evans et al., disclose ultra high molecular weight polyethylene, Evans et al also stated that others could be used depending upon the mechanical characteristics of the plastic material. Therefore, given this teaching, replacing the resorbable material of Schmitt et al with the polyethylene of Evans would have been obvious to one having ordinary skill in the art.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed; and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (703) 308-2252. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro Philogene  
June 23, 2004

  
PEDRO PHILOGENE  
PRIMARY EXAMINER